WHAT IS CLAIMED IS:

1. An image processing method for mapping an input color of an input color gamut to an output color of an output color gamut, said method comprising the steps of:

inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating brightness using a mapping condition which is computed in accordance with highlight portions of the input and output color gamuts, and increases a degree of mapping of the highlight portion compared to middle lightness.

2. The method according to claim 1, wherein the mapping condition is given by a piecewise function.

3. The method according to claim 2, wherein the piecewise function uses a continuous spline function of first order or higher.

4. The method according to claim 1, wherein the mapping condition is computed in accordance with dark portions of the input and output color gamuts.

5. The method according to claim 1, wherein the mapping maps the signal indicating tincture using a mapping condition which is computed in accordance with

high-saturation portions of the input and output color gamuts at a predetermined hue, and increases a degree of mapping of the high-saturation portion compared to a low-saturation portion.

6. The method according to claim 1, wherein the mapping condition is adjustable according to a user instruction.

7. An image processing method for mapping an input color of an input color gamut to an output color of an output color gamut, said method comprising the steps of:

inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating tincture using a mapping condition which is computed in accordance with high-saturation portions of the input and output color gamuts at a predetermined hue, and increases a degree of mapping of the high-saturation portion compared to a low-saturation portion.

8. The method according to claim 7, wherein the mapping condition is given by a piecewise function.

9. The method according to claim 8, wherein the piecewise function uses a continuous spline function of first order or higher.

10. The method according to claim 7, wherein the mapping condition is computed in accordance with high-saturation portions of the input and output color gamuts at a brightness and hue of the input color.

11. The method according to claim 7, wherein the mapping condition is adjustable according to a user instruction.

12. An image processing method for mapping an input color of an input color gamut to an output color of an output color gamut, said method comprising the steps of:

executing a first mapping process for the input color gamut in accordance with the input and output color gamuts; and

executing a second mapping process for a mapped color gamut obtained by the first mapping process in accordance with the mapped color gamut and output color gamut.

13. The method according to claim 12, wherein the first mapping process is a process for compressing a color gamut, and the second mapping process is a process for expanding the color gamut.

14. The method according to claim 13, wherein the second mapping process performs a mapping process that

pertains to brightness and then performs a mapping process that pertains to saturation.

15. The method according to claim 13, wherein the second mapping process performs the enlargement process in accordance with a limit value computed from the input color gamut.

16. The method according to claim 12, wherein the first mapping process maps the input color into the output color gamut by performing adjustment processes of lightness, hue, and saturation of an input color of the input color gamut.

17. A computer program product comprising a computer readable medium having a computer program code, for an image processing method for mapping an input color of an input color gamut to an output color of an output color gamut, said product comprising the steps of:

an input process procedure code for inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

a mapping process procedure code for mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating brightness using a mapping condition which is computed

in accordance with highlight portions of the input and output color gamuts, and increases a degree of mapping of the highlight portion compared to middle lightness.

18. A computer program product comprising a computer readable medium having a computer program code, for an image processing method for mapping an input color of an input color gamut to an output color of an output color gamut, said product comprising the steps of:

an inputting process procedure code for inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

a mapping process procedure code for mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating tincture using a mapping condition which is computed in accordance with high-saturation portions of the input and output color gamuts at a predetermined hue, and increases a degree of mapping of the high-saturation portion compared to a low-saturation portion.

19. A computer program product comprising a computer readable medium having a computer program code, for an image processing method for mapping an input color of an

input color gamut to an output color of an output color gamut, said product comprising the steps of:

a first mapping process procedure code for executing a first mapping process for the input color gamut in accordance with the input and output color gamuts; and

a second mapping process procedure code for executing a second mapping process for a mapped color gamut obtained by the first mapping process in accordance with the mapped color gamut and output color gamut.

20. An image processing apparatus for mapping an input color of an input color gamut to an output color of an output color gamut, comprising:

inputting means for inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

mapping means for mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating brightness using a mapping condition which is computed in accordance with highlight portions of the input and output color gamuts, and increases a degree of mapping of the highlight portion compared to middle lightness.

21. An image processing apparatus for mapping an input color of an input color gamut to an output color of an output color gamut, comprising:

inputting means for inputting an input color signal of the input color gamut, which includes a signal indicating brightness and a signal indicating tincture; and

mapping means for mapping the signal indicating brightness and the signal indicating tincture on the basis of the input and output color gamuts,

wherein the mapping maps the signal indicating tincture using a mapping condition which is computed in accordance with high-saturation portions of the input and output color gamuts at a predetermined hue, and increases a degree of mapping of the high-saturation portion compared to a low-saturation portion.

22. An image processing apparatus for mapping an input color of an input color gamut to an output color of an output color gamut, comprising:

first mapping means for executing a first mapping process for the input color gamut in accordance with the input and output color gamuts; and

second mapping means for executing a second mapping process for a mapped color gamut obtained by the first mapping process in accordance with the mapped color gamut and output color gamut.